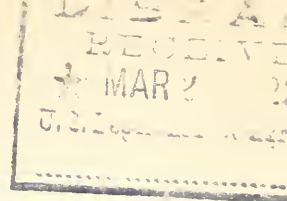


Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



THE EXTENSION HORTICULTURIST

March 1, 1922.

"In Union There is Strength" is an American aphorism, coined and used in the United States, but it has taken all these years for its full and true meaning to be accepted by the farmers of the country. Even now many of them are slow to adopt the community plan of organization as advocated by the extension forces. Read in this issue what one group of New Jersey potato growers accomplished by the formation of a spray ring.

Office of Horticultural and Pomological Investigations
and States Relations Service Cooperating,
U. S. Department of Agriculture,
Washington, D.C.

THE JOURNAL OF THE

ROYAL SOCIETY OF MEDICINE

Volume 10, Part 1, 1917
The Journal of the Royal Society of Medicine
is published monthly, except in the months of
January, February, and March, when it is
published bi-monthly. The subscription price
of the Journal, which includes postage, is
£10 0s 0d per annum in advance.
Single copies are sold at 10s 6d.
Orders for the Journal should be sent to the
Publishers, Messrs. H. K. Lewis, Ltd.,
100, Strand, London, W.C.2.

Printed by Messrs. H. K. Lewis, Ltd.,
100, Strand, London, W.C.2.

Meeting of Southern Agricultural Workers.

The twenty-third annual convention of the Association of Southern Agricultural Workers was held at Atlanta, Georgia, on February 20, 21 and 22. In attendance at this meeting were college and experiment station workers from all over the South also a fair representation from the various bureaus of the U. S. Department of Agriculture at Washington. General sessions were held during each forenoon and section meetings afternoons and evenings. The smoker and theatre party given on Tuesday evening under the auspices of the southern division of the Soil Improvement Committee was thoroughly enjoyed by all.

The Horticultural Section held three meetings, the first on Monday afternoon, being a joint session with the pathologists and was devoted largely to problems connected with the sweet potato. Director W. H. Barre of the South Carolina Experiment Station, Chairman of a special committee on sweet potato fertilizer tests, reported that very little progress had been made and that a large amount of work would be necessary in order to arrive at reliable conclusions. Dr. L. L. Harter, Pathologist, U. S. Department of Agriculture, reviewed results in the fight against field and storage house diseases of sweet potatoes. Dr. Harter emphasized the point that all of the diseases causing field and storage loss of sweet potatoes could be largely prevented by proper cultural practices and careful handling of the potatoes. This is especially true as regards digging the potatoes when the soil is dry while weather conditions are suitable and before frost injury to the vines.

"Three Years of Sweet Potato Certification Work in Arkansas," was the subject of an interesting report by Mr. G. G. Becker of the Arkansas Plant Board, Little Rock, Arkansas. Mr. Becker outlined the Methods in the State of Arkansas for providing field inspection of sweet potatoes grown primarily for seed purposes. Two and sometimes three inspections are made during the latter part of the growing season and the inspection is made very rigid, a tolerance of only two diseased plants to the acre being permitted and in all cases the diseased plants removed.

Mr. Oliver I. Snap, Entomologist of the U. S. Department, who is doing special fruit insect work in the Georgia peach section, gave an interesting report on results of spraying vs. dusting for the control of curculio, brown rot and scab of peaches in Georgia. Mr. Snap emphasized the importance of making the applications at the proper time. It was found that in order to secure minimum injury from curculio on peaches the first application must be made a little earlier than is the common practice. The final results in brown rot control were slightly in favor of spray as compared with dusting. Here again the time of application, especially the final application, proved an important factor. No doubt Mr. Snap will be glad to supply any of the extension workers with the results of these tests.

The Research Session in horticulture was held on Tuesday, February 21st at 2:00 P. M. and included a number of excellent papers and discussions.

1

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the laws of quantum mechanics are in agreement with the experimental facts.

The second part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, and that the properties of matter can be used to determine the structure of the atom.

The third part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of light. It is shown that the theory of the structure of the atom can be used to explain the properties of light, and that the properties of light can be used to determine the structure of the atom.

42

The fourth part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, and that the properties of matter can be used to determine the structure of the atom.

The fifth part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of light. It is shown that the theory of the structure of the atom can be used to explain the properties of light, and that the properties of light can be used to determine the structure of the atom.

The entire program of this session emphasized the need for pushing fundamental research problems and for a more definite understanding of the problems of most vital importance to the horticultural interests. Space will not permit a review of the papers presented but Director H. F. Stuckey of the Georgia Experiment Station, Athens, Georgia, Dr. E. W. Allen, Office of Experiment Stations of the Department, Dr. L. C. Corbett of this Office, Mr. Oliver I. Snap, Entomologist mentioned above and others contributed to the program.

The third or Extension session of the Horticultural program was held on Wednesday afternoon and was devoted largely to a discussion of organization methods in conducting horticultural extension work. Different types of state and county organization were cited and the relative merits of each presented. It was pointed out that there is now a fixed policy on the part of the leaders in all the Southern States to conduct the work only on an organized project basis and to discontinue practically all individual service work. Plans for the year are made during November or December after conference with the county agents and leading growers. These plans are then submitted to the county agents for them to choose the lines of work that they want undertaken during the year in their counties. The report of the standing committee on horticultural extension will be given in a later number of the Horticulturist.

"What I Have Learned About Growing Peaches," was the subject of a very brief but interesting paper presented by Dr. Lyman B. Veeder, peach grower of Baldwin, Georgia. Dr. Veeder is accredited with being one of the best and most successful peach growers in Georgia and his chapter out of his several years of practical experience proved a treat for every horticulturist present.

Prof. T. C. McHatton, Horticulturist, University of Georgia, Athens, Georgia, gave a brief history of the American Pomological Society and made a plea for the support of this important old organization. Prof. McHatton cited the fact that the American Pomological Society was largely responsible for the establishment and progress of early research work in horticulture and that it is still an important factor in the formation of opinion in horticultural circles.

A matter of extreme importance to horticulturists generally was contained in the report made before the Entomologist's section relative to the spread of the Mexican bean beetle. This insect which first made its appearance around Birmingham, Alabama, in 1918, has spread at an alarming rate and threatens to cover the entire bean producing area of the Eastern United States within a comparatively few years. Thus far no satisfactory control measures have been discovered and the insect not only destroys all varieties of garden beans but strikes a threatening blow at the fundamental principle of maintaining soil fertility in the Southern States in that it greatly injures the growth of cowpeas and soy beans. Dr. Hinds, Entomologist of the Alabama Station at Auburn, has issued a bulletin giving the status of the spread of the insect and the means that have been employed in an effort to prevent its spread. Illinois, Indiana, Ohio, West Virginia, Virginia and North Carolina are all directly in the path of the most rapid spread of the insect and unless more adequate control measures are found, it will not be long until it reaches the Atlantic Coast.

"Seven Wise Men Form Spray Ring."

Here is how it was done according to the report contained in the January number of "New Jersey Agriculture" and we reproduce it for the benefit of those who have the same extension problem.

United They Stand.

"If 'Procrastination is the thief of Time' then co-operative is surely Time's righthand man. They have proved it in Salem County anyway. Witness the Hancock's Bridge Potato Spray Ring. County Agent Crissey was the instigator, Dr. W. H. Martin of the College the convincer, Wm. R. Hackett, John Ridgway, Jos. Ridgway, H. N. Fogg, Edward Shimp, John Pancoast, and Edward Grosscup, of Hancock's Bridge, the co-operators.

Ed. Shimp brought the sprayer, the latest and best on the market, and the others agreed to pay him 50 cents per acre per application for depreciation on the sprayer. They pooled their acreage, making a total of 60 acres and agreed to hire a man to do all the spraying at a salary of \$100 a month and board.

Fordeaux Mixture, 5-5-50 was used, the bluestone costing out $6\frac{3}{4}$ cents per pound when bought in barrel lots. When three nozzles per row were used and 200 pounds pressure developed, it took 100 gallons per acre to cover the vines. Some of the members sprayed 4 times and some 3, the total acreage being 196.

For the 7 members the entire expense was \$153.29 for the operator, \$141.68 for materials, \$98 for depreciation and \$9.11 miscellaneous. Thus, expenses per acre per application amounted to \$2.06. Figuring conservatively at \$1 per basket, 6 to 8 baskets more per acre would pay the spray bill.

Now, for the increase. Check plots left at the Ridgway and Hackett farms yielded 161 and 162 bushels per acre, respectively. At the Ridgway farm those sprayed twice yielded 198 bushels per acre and those 4 times, 213. Mr. Hackett harvested 213 bushels to the acre on his plots which had been sprayed 3 times.

No, it would not have paid any one of them to buy a \$300 sprayer for his few acres, but the co-operative scheme put money in all their pockets."

Illustrations.

We would like photographs showing demonstration exhibits at fairs, in show windows, or elsewhere. A good illustration of this kind carries home a lesson better than a word picture can do it. In the past year we have mentioned photographs from Wisconsin, Indiana and Ohio. If any of our readers have such pictures, please send us copies and we will write them up for the "Extension Horticulturist."

Blueberry Demonstrations.

Massachusetts started 4 blueberry demonstrations last year. This is a fine line of work for the New England and many other states. We would

like to know how many of the extension men have already started, or are contemplating starting, work with blueberries.

Home Fruit Gardens.

Massachusetts has started 4 demonstration home fruit gardens including raspberries, strawberries, currants, gooseberries and grapes. More than 100 people visited these gardens last year. To make this type of garden complete, blackberries, and such hardy vegetables as asparagus and rhubarb, and perhaps horse radish and multiplier onions also, should be added.

To the extension men interested in a permanent fruit and vegetable garden we wish to call attention to Farmers' Bulletin No. 1242 on this subject. This type of fruit and vegetable garden ought to be strongly featured in 1922.

Special Potato Bulletin.

"Development of Tubers in the Potato" is the title of Department Bulletin No. 958 by Dr. Chas. F. Clark, who is associated with Prof. Wm. Stuart in the Irish potato work of the Office of Horticultural and Pomological Investigations. This bulletin treats especially of the conditions which attend the setting and subsequent development of the tubers of the potato and is of interest to those who are working upon potato production problems. Copies can be purchased for 5 cents each from the Superintendent of Documents, Government Printing Office, Washington, D. C.

W. B. Nissley of Pennsylvania is heard from.

"I have your last issue of the "Extension Horticulturist" and am sending you a little material which may be interesting. I believe that all of us Extension men have been a little to blame in not furnishing short articles regarding our work for each other's benefit.

The summarized report on our campaign for better seed that I am enclosing covers part of our extension work here in Pennsylvania during the year 1921. I might state that the program for 1922 is coming along in fine shape. I have already scheduled as much work for 1922 as was scheduled during the past two years combined, mostly along the line of improvement.

We have been helping on this particular line of work and from the number of inquiries from growers and also the interest that is taken by the County Agents, I think that we have sold this particular idea fairly well. This brief report brings out the tremendous differences that are secured from different sources of seed although of the same variety."

"During the past season six cabbage demonstrations were conducted in as many counties, using ten sources of seed of the variety known as Copenhagen Market. Using current market prices as a basis for determining results the best seed proved over 100% more profitable than the poorest, the difference being mainly in the earliness of maturity.

1870

1871

1872

1873

1874

1875

1876

1877

1878

1879

1880

1881

1882

1883

1884

1885

Twelve demonstrations with Danish Ballhead cabbage were conducted in as many counties and the outstanding seed source proved to be the same as last year. In some of the tests the yields ranged from 21.9 tons per acre to nothing. At current prices this indicates a cash difference between \$650 an acre and nothing."

In tomato work nine sources of early varieties were compared and two sources of main crop varieties. Included in these was one selection of Earliana put out by The Pennsylvania State College which outyielded the nearest competitor by one-third. The appearance and percentage of firsts over culls was also noticeable. Two main crop varieties originating also at the Pennsylvania State College showed wonderful possibilities and will be used state-wide this year.

Special Strains of Vegetable Seeds.

A recent circular letter sent out by Prof. H. A. Jones of the Horticultural Department, University of Maryland, asks for the names of seed growers and dealers who make a specialty of breeding and growing varieties and strains of vegetables having superior character and quality. We receive frequent calls for this sort of information and would greatly appreciate if extension workers in horticulture would advise us whenever they learn of a case where a particular strain of seed has given marked results also the conditions under which the trial or demonstration was made. The best seed sources will necessarily vary somewhat from year to year but tests thus far show that the same source can be depended upon in about nine cases out of ten. A list of this sort must be kept up to date in order to be of any value and the cooperation of everyone is essential.

What We Plan.

For several months we have done very little traveling and have visited a comparatively few of the state extension specialists. Reorganization plans have been under way but we are now asked to submit a working plan covering the period until July 1st, also a tentative plan for the remainder of the summer. Under the present arrangement it will be largely up to the state specialists as to the states we visit and we would like to hear promptly from a number of specialists regarding any points where we may be of particular help and at the same time gain something ourselves that we can carry to other workers.

W. R. Beattie,
Extension Horticulturist.

G. P. Close,
Extension Pomologist.

